INTRODUCTION FOR VENDOR INFORMATION
WS AND WP CHEMISTRY STUDY SERIES
DECEMBER 22, 1999

The following communication was provided by the Environmental Laboratory Accreditation Program (ELAP) in 1999 to inform vendors of the needs of ELAP for the State certification program. These vendors had expressed interest in providing drinking water and wastewater performance evaluation (PE) study samples for ELAP purposes. This type of communication was necessary at that time due to the U.S. Environmental Protection Agency's (USEPA) decision to privatize the manufacture of PE study samples which resulted in the increase in the number of vendors from one to ten. Since the communication included the analytes for the USEPA water supply and water pollution studies, as well as the California specific analytes, ELAP provided separate listings for clarification. The sample preparation and scoring of the Federal analytes were well established by the USEPA, but the sample preparation and scoring of the California specific analytes were not available. Due to similarities of the California specific analytes to the Federal analytes, ELAP directed the vendors to prepare samples containing the California specific analytes to meet USEPA requirements as well.

Similarly, due to the lack of data for the California specific analytes, ELAP established acceptance criteria based on historical USEPA data for similar analytes. The resulting acceptance criteria were to be adjusted for appropriateness with input from the vendors and from their available data. With very few participants in the PE studies for the California specific analytes, sufficient data could not be collected during a short time period. However, with additional studies and time, ELAP was able to prepare a series of acceptance criteria which were posted on the ELAP website in 2002 as part of the proposed regulations for the performance evaluation testing process (R-03-00) for comments.

The December 22, 1999, communication is being posted again on the ELAP website as instructed by management. Since none of the vendors have contracts with ELAP, the communication was provided as a guideline for the vendors to use in the preparation of drinking water and wastewater performance evaluation samples containing California specific analytes, and for the scoring of participant data for these samples. Information that is needed by ELAP for administering future studies to evaluate laboratory performance have been shaded for posting.

DEPARTMENT OF HEALTH SERVICES
2151 BERKELEY WAY
BERKELEY, CA 94704-1011
(510)540-2800

December 22, 1999

ELAP PERFORMANCE EVALUATION STUDY PROGRAM
WATER SUPPLY (WS) AND WATER POLLUTION (WP) STUDY SERIES
CHEMISTRY
VENDOR INFORMATION

California State Environmental Laboratory Accreditation Program (ELAP) has a two-tiered certification program for laboratories performing testing of environmental samples: NELAP accreditation program; ELAP certification program. The terminology "proficiency testing studies" or "PT studies" refers to the NELAP accreditation program. The term "performance evaluation studies" or PE studies" refers to the California ELAP certification program. The information provided in this communique describes the ELAP certification program, which is California's regular certification program.

Since the NIST accreditation program of vendors is of limited scope and does not include the analytes outside of those covered in NIST's accreditation program, separate vendor listings (generated from vendor responses to ELAP) have been provided to our laboratories. These listings have been enclosed along with the analytes lists. If you plan to provide the listed analytes from January 01, 2000, are able to meet California's needs, and would like to be included as a vendor for such study samples, please contact Jane Jensen at (510) 540-2800 by January 07, 2000, in order for your company to be included in an updated list which will be sent to our laboratories. If you would like to be removed from one or more of the listings, please provide the request in writing to Jane Jensen at the above address.

Laboratories certified in California are required to submit results by all methods requested for certification. Thus, the laboratories have been instructed to make copies of the blank report forms to facilitate such reporting to the vendor of choice. Laboratories are permitted to report multiple results for the same analytes from one sample. Since different analytical methods are to be utilized in such cases, the occurance of identical reported results are technically not probable.

Since California certification includes mobile laboratories and auxilliary laboratories/units associated with stationary/parent laboratories, multiple samples may be requested by the stationary/parent laboratory. Each mobile laboratory and each auxilliary laboratory/unit must possess its own EPA laboratory ID code. If such information is not made available, please remind the laboratory to contact Fred Choske at (510) 540-2800, immediately.

Enclosed are information packets which consist of evaluation report formats and other information for the California ELAP certification program.

Please contact Jane Jensen at (510) 540-2800, if you have any questions Your cooperation is greatly appreciated.

Sincerely

George C. Kulasingham Ph.D.
Program Chief

(Signed by JJ)

Jane Jensen
Environmental Laboratory Accreditation Program

Enclosure

- Categories 1, 2 & 3 (drinking water
- Categories 1, 2 & 3 (wastewater)
- Laboratory evaluation profiles
- Analyte DL, DLR, MDL, MCL
- Vendor Information
- Sample Concentrations

DRINKING WATER MATRIX
CATEGORY 1
(December 1999)

Category 1 consists of analytes which will be provided by vendors who have been accredited to provide these analytes by the National Institute of Science and Technology (NIST). A vendors list for these analytes is attached.

Metals

antimony
arsenic
asbestos
barium
beryllium
cadmium
chromium
copper
lead
manganese
mercury
nickel
selenium
thallium
zinc

Inorganics & Physical Properties

alkalinity
cyanide
fluoride
hardness
nitrate
nitrite
ortho-phosphate
sodium
sulfate
TOC
total filterable residue

EPA Method 502.2

Federal regulated analytes" (20 total + vinyl chloride)

benzene
carbon tetrachloride
chlorobenzene
1,2-dichlorobenzene
1,4-dichlorobenzene
1,2-dichloroethane
1,1-dichloroethylene
cis-1,2-dichloroethylene
trans-1,2-dichloroethylene
dichloromethane
1,2-dichloropropane
ethylbenzene
styrene
tetrachloroethylene
toluene
1,2,4-trichlorobenzene
1,1,1-trichloroethane
1,1,2-trichloroethane
trichloroethylene
vinyl chloride
xylenes (total)

"Federal unregulated analytes" (37 total)

bromobenzene
bromochloromethane
bromodichloromethane
bromoform
bromomethane
n-butylbenzene
sec-butylbenzene
tert-butylbenzene
chlorodibromomethane
chloroethane
chloroform
chloromethane
2-chlorotoluene
4-chlorotoluene
dibromomethane
1,3-dichlorobenzene
dichlorodifluoromethane

EPA Method 502.2 (continued

1,1-dichloroethane
1,3-dichloropropane
2,2-dichloropropane
1,1-dichloropropene
cis-1,3-dichloropropene
trans-1,3-dichloropropene
fluorotrichloromethane
hexachlorobutadiene
isopropylbenzene
4-isopropyltoluene
n-propylbenzene
1,1,1,2-tetrachloroethane
1,1,2,2-tetrachloroethane
1,2,3-trichlorobenzene
1,2,4-trimethylbenzene
1,2,3-trichloropropane
1,3,5-trimethylbenzene

"trihalomethanes"

bromodichloromethane
bromoform
chlorodibromomethane
chloroform

EPA Method 502.2 (trihalomethanes only)

bromodichloromethane
bromoform
chlorodibromomethane
chloroform

EPA Method 504.1

1,2-dibromo-3-chloropropane (DBCP)
ethylene dibromide (EDB)
1,2,3-trichloropropane

EPA Method 505

aldrin
chlordane
dieldrin
endrin
heptachlor
heptachlor epoxide
hexachlorobenzene
hexachlorocyclopentadiene
lindane
methoxychlor
toxaphene

EPA Method 506

di(2-ethylhexyl)adipate
di(2-ethylhexyl)phthalate
diethylphthalate

EPA Method 507

alachlor
atrazine
simazine

EPA Method 508

aldrin
dieldrin
endrin
heptachlor
heptachlor Epoxide
hexachlorobenzene
methoxychlor
propachlor
trifluralin

EPA Method 508.1

aldrin
atrazine
dieldrin
endrin
heptachlor
heptachlor Epoxide
hexachlorobenzene
lindane
methoxychlor
propachlor
simazine
trifluralin

EPA Method 508A

decachlorobiphenyl

EPA Method 515.1

2,4-D
dicamba
dinoseb
pentachlorophenol
picloram
2,4,5-TP (silvex)

EPA Method 515.2

acifluorfen
2,4-D
dicamba
dinoseb
pentachlorophenol
picloram
2,4,5-TP (silvex)

EPA Method 524.2

"Federal regulated analytes" (20 total + vinyl chloride)

benzene
carbon tetrachloride
chlorobenzene
1,2-dichlorobenzene
1,4-dichlorobenzene
1,2-dichloroethane

EPA Method 524.2 (continued)

1,1-dichloroethylene
cis-1,2-dichloroethylene
trans-1,2-dichloroethylene
dichloromethane
1,2-dichloropropane
ethylbenzene
styrene
tetrachloroethylene
toluene
1,2,4-trichlorobenzene
1,1,1-trichloroethane
1,1,2-trichloroethane
trichloroethylene
vinyl chloride
xylenes (total)

"Federal unregulated analytes" (37 total

bromobenzene
bromochloromethane
bromodichloromethane
bromoform
bromomethane
n-butylbenzene
sec-butylbenzene
tert-butylbenzene
chlorodibromomethane
chloroethane
chloroform
chloromethane
2-chlorotoluene
4-chlorotoluene
dibromomethane
1,3-dichlorobenzene
dichlorodifluoromethane
1,1-dichloroethane
1,3-dichloropropane
2,2-dichloropropane
1,1-dichloropropene
cis-1,3-dichloropropene
trans-1,3-dichloropropene
fluorotrichloromethane
hexachlorobutadiene
isopropylbenzene
4-isopropyltoluene
n-propylbenzene

EPA Method 524.2 (continued

1,1,1,2-tetrachloroethane
1,1,2,2-tetrachloroethane
1,2,3-trichlorobenzene
1,2,4-trimethylbenzene
1,2,3-trichloropropane
1,3,5-trimethylbenzene

"trihalomethanes

bromodichloromethane
bromoform
chlorodibromomethane
chloroform

EPA Method 524.2 (trihalomethanes only)

bromodichloromethane
bromoform
chlorodibromomethane
chloroform

EPA Method 525.2

alachlor
aldrin
atrazine
dieldrin
endrin
heptachlor
heptachlor Epoxide
hexachlorobenzene
hexachlorocyclopentadiene
lindane
methoxychlor
propachlor
simazine
toxaphene
trifluralin

benzo(a)pyrene

di(2-ethylhexyl)adipate
di(2-ethylhexyl)phthalate

pentachlorophenol

EPA Method 531.1

aldicarb
aldicarb sulfone
aldicarb sulfoxide
carbofuran
methomyl
oxamyl (vydate)

EPA Method 547

glyphosate

EPA Method 548.1

endothall

EPA Method 549.2

diquat

EPA Method 550

benzo(a)pyrene

EPA Method 550.1

benzo(a)pyrene

EPA Method 551

carbontetrachloride
tetrachloroethylene
1,1,1-trichloroethane
trichloroethylene

bromodichloromethane
bromoform
chlorodibromomethane
chloroform

chloral hydrate

EPA Method 551 (trihalomethanes only)

bromodichloromethane
bromoform
chlorodibromomethane
chloroform
total trihalomethanes

EPA Method 552.1 (dalapon only)

dalapon

EPA Method 555

acifluorfen
2,4-D
2,4,5-TP
dinoseb
pentachlorophenol
pichloram

EPA Method 1613

dioxin (2,3,7,8-TCDD

CATEGORY 1
DRINKING WATER MATRIX
VENDORS
(October 25, 1999)

Provider	Address/Telephone/FAX/E-mail	Contact
Absolute Standards Inc.	P.O. Box 5585 Hamden, CT 06518 800-368-1131 FAX 800-410-2577 Absolutest@aol.com	Stephen J. Arpie
AccuStandard	125 Market Street New Haven, CT 06513 203-786-5290 (ext 117 FAX 203-786-5287 jy@accustandard.com	John Yanusas
APG (Analytical Products Group, Inc.)	2730 Washington Blvd. Belpre, OH 45714 614-423-4200 or 800-272-4442 FAX 740-423-5588 APG@citynet.net	Tom Coyner
ERA (Environmental Resource Associates)	5540 Marshall Street Arvada, CO 80002 800-372-0122 FAX 303-421-0159 qcstds@aol.com	Chuck Wibby
New York State	Environmental Laboratory Approval Program NYSDoH, Wadsworth Center P.O. Box 509 Albany, NY 12201 518-485-5570 FAX 518-485-5568 Caruso@wadsworth.org	Matthew Caruso
Protocol Analytical Supplies	472 Lincoln Blvd Middlesex, NJ 08846 732-627-0500 FAX 732-627-0979 Bhahn@prostds.com	William H Hahn
SPEX Certiprep	203 Norcross Avenue Metuchen, NJ 08840 732-549-7144 (ext 418) FAX 732-494-1747 VSkivakumar@spexcsp.com	Vanaja Sivakumar
ULTRA Scientific, Inc.	250 Smith Street N. Kingstown, RI 02852 401-294-9400 FAX 401-295-2330 Emartz@ultrasci.com	Edward Martz

DRINKING WATER MATRIX
CATEGORY 2
(December 1999)

Category 2 consists of analytes which are not applicable as category 1 analytes, and are additional analytes required by California. A vendors list for these analytes are attached.

Metals

aluminum
iron
silver

Inorganic Chemicals & Physical Properties

calcium
chloride
conductivity
magnesium
MBAS
potassium
silica

EPA Method 505

aroclor 1016/1242
aroclor 1232
aroclor 1248
aroclor 1254
aroclor 1260

EPA Method 506

butylbenzylphthalate
diethylphthalate
dimethylphthalate
di-n-butylphthalate

EPA Method 507

bromacil
butachlor
metolachlor
metribuzin
prometon

EPA Method 508

aroclor 1016/1242
aroclor 1232
aroclor 1248
aroclor 1254
aroclor 1260

EPA Method 508.1

aroclor 1016/1242
aroclor 1232
aroclor 1248
aroclor 1254
aroclor 1260

EPA Method 525.2

acenaphthylene
anthracene
benzo(a)anthracene
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(g,h,i)perylene
chrysene
dibenzo(a,h)anthracene
fluorene
indeno(1,2,3-c,d)pyrene
phenanthrene
pyrene

butylbenzylphthalate
diethylphthalate
dimethylphthalate
di-n-butylphthalate

EPA Method 549.2

paraquat

EPA Method 550

acenaphthylene
anthracene
benzo(a)anthracene
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(g,h,i)perylene
chrysene
dibenzo(a,h)anthracene
fluorene
indeno(1,2,3-c,d)pyrene
naphthalene
phenanthrene
pyrene

EPA Method 550.1

acenaphthylene
anthracene
benzo(a)anthracene
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(g,h,i)perylene
chrysene
dibenzo(a,h)anthracene
fluorene
indeno(1,2,3-c,d)pyrene
naphthalene
phenanthrene
pyrene

CATEGORY 2
DRINKING WATER MATRIX
VENDORS

Provider	Address/Telephone/FAX/E-mail	Contact
Absolute Standards, Inc	P.O. Box 5585 Hamden, CT 06518 800-368-1131 FAX 800-410-2577 Absolutest@aol.com	Stephen J
AccuStandard	125 Market Street New Haven, CT 06513 203-786-5290 (ext 117) FAX 203-786-5287 jy@accustandard.com	John Yanusas
APG (Analytical Products Group, Inc.)	2730 Washington Blvd. Belpre, OH 45714 614-423-4200 or 800-272-4442 FAX 740-423-5588 APG@citynet.net	Tom Coyner
ERA (Environmental Resource Associates)	5540 Marshall Street Arvada, CO 80002 800-372-0122 FAX 303-421-0159 qcstds@aol.com	Chuck Wibby
New York State	Environmental Laboratory Approval Program NYSDoH, Wadsworth Center P.O. Box 509 Albany, NY 12201 518-485-5570 FAX 518-485-5568 Caruso@wadsworth.org	Matthew Caruso
NSI Solutions	2 Triangle Drive RTP, NC 27709 800-234-7837 FAX 919-544-0334 Mark.hammersla@mantech.com	Mark Hammersla
Protocol Analytical Supplies	472 Lincoln Blvd Middlesex, NJ 08846 732-627-0500 FAX 732-627-0979 Bhahn@prostds.com	William H.
RT Corporation	P.O. Box 1346 Laramie, WY 82073 307-742-5452 or 800-576-5690 FAX 307-745-7936 RT-Corp@AT-Corp.com	Bob Rucinski
SPEX Certiprep	203 Norcross Avenue Metuchen, NJ 08840 732-549-7144 (ext 418) FAX 732-494-1747 VSkivakumar@spexcsp.com	Vanaja Sivakumar
ULTRA Scientific, Inc.	250 Smith Street N. Kingstown, RI 02852 401-294-9400 FAX 401-295-2330 Emartz@ultrasci.com	Edward Martz

DRINKING WATER MATRIX
CATEGORY 3
(December 1999)

Category 3 consists of analytes which are available from a limited number of vendors, are additional analytes required by California, and are not applicable as categories 1 or 2.

Inorganic Chemicals & Physical Properties

chlorine (combined & total)
chlorine (total)
corrosivity (Langlier's index)
perchlorate
UV_{254}

EPA Method 502.2

ethyl-t-butylether (ETBE)
t-amylmethylether (TAME)
di-isopropylether (DIPE)
trichlorotrifluoromethane
MTBE
1-phenylpropane

EPA Method 507

chlorothalonil
diazinon
dimethioate
molinate (ordram)
prometryn
thiobencarb

EPA Method 515.1

bentazon

EPA Method 515.2

bentazon

EPA Method 524.2

ethyl-t-butylether (ETBE)
t-amylmethylether (TAME)
di-isopropylether (DIPE)
trichlorotrifluoromethane
MTBE
1-phenylpropane

EPA Method 531.1

carbaryl
3-hydroxycarbofuran

EPA Method 525.2

molinate (ordram)

EPA Method 632

diuron

SM 6610

carbaryl
3-hydroxycarbofuran

ASTM Method D5475-93

molinate (ordram)

CATEGORY 3
DRINKING WATER MATRIX
VENDORS

Provider	Address/Telephone/FAX/E-mail	Contact
Absolute Standards, Inc	P.O. Box 5585 Hamden, CT 06518 800-368-1131 FAX 800-410-2577 Absolutest@aol.com	Stephen J Arpie
AccuStandard	125 Market Street New Haven, CT 06513 203-786-5290 (ext 117 FAX 203-786-5287 jy@accustandard.com	John Yanusas
ERA (Environmental Resource Associates)	5540 Marshall Street Arvada, CO 80002 800-372-0122 FAX 303-421-0159 qcstds@aol.com	Chuck Wibby
NSI Solutions	2 Triangle Drive RTP, NC 27709 800-234-7837 FAX 919-544-0334 Mark.hammersla@mantech.com	Mark Hammersla
RT Corporation	P.O. Box 1346 Laramie, WY 82073 307-742-5452 or 800-576-5690 FAX 307-745-7936 RT-Corp@AT-Corp.com	Bob Rucinski
SPEX Certiprep	203 Norcross Avenue Metuchen, NJ 08840 732-549-7144 (ext 418) FAX 732-494-1747 VSkivakumar@spexcsp.com	Vanaja Sivakumar

WASTEWATER MATRIX
CATEGORY 1
(December 1999)

Category 1 consists of analytes which will be provided by vendors who have been accredited to provide these analytes by the National Institute of Science and Technology (NIST). A vendors list for these analytes is attached.

Metals

aluminum
antimony
arsenic
beryllium
cadmium
chromium
cobalt
copper
iron
lead
manganese
mercury
molybdenum
nickel
selenium
silver
thallium
titanium
vanadium
zinc

Inorganics & Physical Properties

alkalinity
ammonia
biochemical oxygen demand (BOD)
calcium
carbonaceous biochemical oxygen demand (cBOD)
chemical oxygen demand
chloride
total chlorine residual
cyanide
fluoride

Inorganics & Physical Properties (continued

hardness
Kjeldahl nitrogen
magnesium
nitrate
oil & grease
organic carbon (TOC)
pH
phenols
ortho-phosphate
total phosphorus
potassium
filterable residue (total dissolved solids)
nonfilterable residue (total suspended solids)
sodium
specific conductance
sulfate
total filterable residue

EPA Method 601

bromodichloromethane
bromoform
carbon tetrachloride
chlorobenzene
chloroform
dibromochloromethane
1,2-dichloroethane
methylene chloride
tetrachloroethene
1,1,1-trichloroethane
trichloroethene

EPA Method 602

benzene
chlorobenzene
ethylbenzene
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
toluene

EPA Method 608

aroclor 1016/1242
aroclor 1232
aroclor 1248
aroclor 1254
aroclor 1260

aldrin
chlordane
dieldrin
DDD
DDE
DDT
heptachlor
heptachlor epoxide

EPA Method 608 (PCBs only)

aroclor 1016/1242
aroclor 1232
aroclor 1248
aroclor 1254
aroclor 1260

EPA Method 608 (pesticides only)

aldrin
chlordane
dieldrin
DDD
DDE
DDT
heptachlor
heptachlor epoxide

EPA Method 612

1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene

EPA Method 624

benzene
ethylbenzene
toluene
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
bromodichloromethane
bromoform
carbon tetrachloride
chlorobenzene
chloroform
dibromochloromethane
1,2-dichloroethane
methylene chloride
tetrachloroethene
1,1,1-trichloroethane
trichloroethene

EPA Method 625

1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene

aldrin
DDD
DDE
DDT
heptahlor
dieldrin
heptachlor epoxide

EPA Method 625 (excluding pesticipdes & PCBs)

1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene

EPA Method 1624

bromodichloromethane
bromoform
carbon tetrachloride
chlorobenzene
chloroform
dibromochloromethane
1,2-dichloroethane
methylene chloride
tetrachloroethene
1,1,1-trichloroethane
trichloroethene

benzene
ethylbenzene
toluene

EPA Method 1625

1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene

CATEGORY 1
WASTEWATER MATRIX
VENDORS
(October 25, 1999)

Provider	Address/Telephone/FAX/E-mail	Contact
Absolute Standards, Inc.	P.O. Box 5585 Hamden, CT 06518 800-368-1131 FAX 800-410-2577 Absolutest@aol.com	Stephen J. Arpie
AccuStandard	125 Market Street New Haven, CT 06513 203-786-5290 (ext 117 FAX 203-786-5287 jy@accustandard.com	John Yanusas
APG (Analytical Products Group, Inc.)	2730 Washington Blvd. Belpre, OH 45714 614-423-4200 or 800-272-4442 FAX 740-423-5588 APG@citynet.net	Tom Coyner
ERA (Environmental Resource Associates)	5540 Marshall Street Arvada, CO 80002 800-372-0122 FAX 303-421-0159 qcstds@aol.com	Chuck Wibby
New York State	Environmental Laboratory Approval Program NYSDoH, Wadsworth Center P.O. Box 509 Albany, NY 12201 518-485-5570 FAX 518-485-5568 Caruso@wadsworth.org	Matthew Caruso
Protocol Analytical Supplies	472 Lincoln Blvd Middlesex, NJ 08846 732-627-0500 FAX 732-627-0979 Bhahn@prostds.com	William H. Hahn
SPEX Certiprep	203 Norcross Avenue Metuchen, NJ 08840 732-549-7144 (ext 418) FAX 732-494-1747 VSkivakumar@spexcsp.com	Vanaja Sivakumar
ULTRA Scientific, Inc.	250 Smith Street N. Kingstown, RI 02852 401-294-9400 FAX 401-295-2330 Emartz@ultrasci.com	Edward Martz

WASTEWATER MATRIX
CATEGORY 2
(December 1999)

Category 2 consists of analytes which are not applicable as category 1 analytes, and are additional analytes required by California. A vendors list for these analytes are attached.

Metals

barium
chromium (VI)
gold
iridium
osmium
platinum
rhodium
ruthenium
tin

Inorganics & Physical Properties

boron (non-colorimetric method)
total residue
surfactants (MBAS)

EPA Method 603

acrolein
acrylonitrile

EPA Method 604

2-chlorophenol
2-nitrophenol
phenol
2.4.6-trichlorophenol
pentachlorophenol
4-chloro-3-methylphenol

EPA Method 605

benzidine
3,3'-dichlorobenzidine

EPA Method 606

butylbenzylphthalate
de(2-ethylhexyl)phthalate
diethylphthalate
dimethylphthalate
di-n-butylphthalate

EPA Method 607

N-nitrosodimethylamine
N-nitrosodiphenylamine
N-nitrosodi-n-propylamine

EPA Method 609

2.4-dinitrotoluene
2.6-dinitrotoluene
isophorone
nitrobenzene

EPA Method 610

acenaphthylene
benzo(a)anthracene
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(g,h,i)perylene
chrysene
dibenzo(a,h)anthracene
fluorene
indeno(1,2,3-c,d)pyrene
naphthalene
phenanthrene
pyrene

EPA Method 611

bis(2-chloroethyl)ether
bis(2-chloroethoxy)methane
bis(2-chloroisopropyl)ether
4-bromophenylphenylether
4-chlorophenylphenylether

EPA Method 612

2-chloronaphthalene
1,2,4-trichlorobenzene
hexachlorobenzene
hexachlorobutadiene
hexachlorocyclopentadiene
hexachloroethane

EPA Method 613

dioxin (2,3,7,8-TCDD)

EPA Method 625

acenaphthylene
benzo(a)anthracene
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(g,h,i)perylene
chrysene
dibenzo(a,h)anthracene
fluorene
indeno(1,2,3-c,d)pyrene
naphthalene
phenanthrene
pyrene

butylbenzylphthalate
di(2-ethylhexyl)phthalate
diethylphthalate
dimethylphthalate
di-n-butylphthalate

EPA Method 1625

acenaphthylene
benzo(a)anthracene
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(g,h,i)perylene
chrysene
dibenzo(a,h)anthracene
fluorene
indeno(1,2,3-c,d)pyrene
naphthalene
phenanthrene
pyrene

butylbenzylphthalate
di(2-ethylhexyl)phthalate
diethylphthalate
dimethylphthalate
di-n-butylphthalate

CATEGORY 2
WASTEWATER MATRIX
VENDORS

Provider	Address/Telephone/FAX/E-mail	Contact
Absolute Standards, Inc.	P.O. Box 5585 Hamden, CT 06518 800-368-1131 FAX 800-410-2577 Absolutest@aol.com	Stephen J. Arpie
AccuStandard	125 Market Street New Haven, CT 06513 203-786-5290 (ext 117) FAX 203-786-5287 jy@accustandard.com	John Yanusas
APG (Analytical Products Group, Inc.)	2730 Washington Blvd. Belpre, OH 45714 614-423-4200 or 800-272-4442 FAX 740-423-5588 APG@citynet.net	Tom Coyner
ERA (Environmental Resource Associates)	5540 Marshall Street Arvada, CO 80002 800-372-0122 FAX 303-421-0159 qcstds@aol.com	Chuck Wibby
New York State	Environmental Laboratory Approval Program NYSDoH, Wadsworth Center P.O. Box 509 Albany, NY 12201 518-485-5570 FAX 518-485-5568 Caruso@wadsworth.org	Matthew Caruso
NSI Solutions	2 Triangle Drive RTP, NC 27709 800-234-7837 FAX 919-544-0334 Mark.hammersla@mantech.com	Mark Hammersla
Protocol Analytical Supplies	472 Lincoln Blvd Middlesex, NJ 08846 732-627-0500 FAX 732-627-0979 Bhahn@prostds.com	William H. Hahn
RT Corporation	P.O. Box 1346 Laramie, WY 82073 307-742-5452 or 800-576-5690 FAX 307-745-7936 RT-Corp@AT-Corp.com	Bob Rucinski
SPEX Certiprep	203 Norcross Avenue Metuchen, NJ 08840 732-549-7144 (ext 418) FAX 732-494-1747 VSkivakumar@spexcsp.com	Vanaja Sivakumar
ULTRA Scientific, Inc.	250 Smith Street N. Kingstown, RI 02852 401-294-9400 FAX 401-295-2330 Emartz@ultrasci.com	Edward Martz

WASTEWATER MATRIX
CATEGORY 3
(December 1999)

Category 3 consists of analytes which are available from a limited number of vendors, are additional analytes required by California, and are not applicable as categories 1 or 2.

Metals

asbestos
palladium

Inorganics & Physical Properties

acidity
boron (colorimetric method)
bromide
nitrite
settleable residue (settleable solids)
volatile residue
silica
sulfide (includes total and soluble)
tannin & lignin
turbidity
total recoverable PHCs by IR
total organic halides (TOX)

EPA Method 610

anthracene
benzo(a)pyrene

EPA Method 625

anthracene
benzo(a)pyrene

EPA Method 632

carbofuran
diuron
methomyl
oxamyl (vydate)
propham

EPA Method 1625

anthracene
benzo(a)pyrene

CATEGORY 3
WASTEWATER MATRIX
VENDORS

Provider	Address/Telephone/FAX/E-mail	Contact
Absolute Standards, Inc.	P.O. Box 5585 Hamden, CT 06518 800-368-1131 FAX 800-410-2577 Absolutest@aol.com	Stephen J. Arpie
AccuStandard	125 Market Street New Haven, CT 06513 203-786-5290 (ext 117) FAX 203-786-5287 jy@accustandard.com	John Yanusas
ERA (Environmental Resource Associates)	5540 Marshall Street Arvada, CO 80002 800-372-0122 FAX 303-421-0159 qcstds@aol.com	Chuck Wibby
NSI Solutions	2 Triangle Drive RTP, NC 27709 800-234-7837 FAX 919-544-0334 Mark.hammersla@mantech.com	Mark Hammersla
RT Corporation	P.O. Box 1346 Laramie, WY 82073 307-742-5452 or 800-576-5690 FAX 307-745-7936 RT-Corp@AT-Corp.com	Bob Rucinski
SPEX Certiprep	203 Norcross Avenue Metuchen, NJ 08840 732-549-7144 (ext 418) FAX 732-494-1747 VSkivakumar@spexcsp.com	Vanaja Sivakumar

Evaluation Profile (drinking water)

Since certification for inorganic fields-of-testing are by individual analytes the inorganic analytes in a performance evaluation study are evaluated individually and the evaluation report must have the method of analysis for the analyte.

2. Since certification for organic fields-of-testing are by methods, the organic analytes in a performance evaluation study are evaluated individually and the overall evaluation by method must also appear in the evaluation report. The laboratory must obtain "acceptable" rating for all represented analytes for each method in order to receive an "acceptable" rating for the method.

3. In accordance with 40 CFR 141.24(f)(17)(i) and 40 CFR 141.24(f)(17)(ii), the 85% "acceptable" rating mentioned in CC&R Title 22, section 64809, is only applicable to volatile organic compound analyses with exclusion of vinylchloride. The regulated and unregulated volatile organic compounds are graded separately, and the laboratory must obtain an "acceptable" rating for both regulated and unregulated volatile organic compounds in order to receive an "acceptable" rating for the method used. If the laboratory receives two "not acceptable" rating for vinylchloride analysis, the laboratory will be denied certification for the method used, regardless of the scores obtained for the regulated and unregulated volatile organic compounds.

4 Volatile organic compounds (VOCs), excluding vinylchloride, are evaluated separately by regulated VOCs and by unregulated VOCs. A percent acceptable score is determined for regulated VOCs by dividing the number of analytes with "acceptable" scores by the total number of possible regulated VOCs by method for the study. A percent acceptable score is determined for unregulated VOCs by dividing the number of analytes with "acceptable" scores by the total number of possible unregulated VOCs by method for the study. A separate score is provided for the vinylchloride. If vinylchloride is evaluated as "not acceptable", the overall method is evaluated as "not acceptable". If vinylchloride is evaluated as "acceptable", and both the regulated and unregulated VOCs are rated "acceptable", the overall method is evaluated as "acceptable". If however, vinylchloride is evaluated as "acceptable", and the regulated and/or the unregulated VOCs are rated "not acceptable", the overall method is evaluated as "not acceptable".

(An "acceptable" rating for regulated VOCs (excluding vinylchloride) is $\geq$ 85% acceptable analytes. An "acceptable" rating for unregulated VOCs is $\geq$ 85% acceptable analytes.)

5. Additional California analytes in categories 2 and 3 shall be evaluated individually. Since linear regression equations are not available for these analytes, the following percent acceptance ranges have been provided. The acceptance ranges are preliminary and subject to change.

Metals

$\pm$ 30% for levels < 10 ppb
$\pm$ 20% for levels $\geq$ 10 ppb

Evaluation Profile (drinking water)

Inorganic Chemicals & Physical Properties

± 25% for levels < 10 ppm
± 15% for levels ≥ 10 ppm

Adipates/Phthalates

± 70% for all levels

Carbamates

± 45% for all levels

Herbicides

± 50% for all levels

PAHs

± 50% for all levels

Paraquat

± 50% for all levels

PCBs in Water

Linear regression equations for WP studies at similar concentration range are applicable.

Pesticides

± 45% for all levels

VOCs

± 40% for levels < 10 µg/L
± 20% for levels ≥ 10 µg/L

Evaluation Profile (wastewater

Since certification for inorganic fields-of-testing are by individual analyte, the inorganic analytes in a performance evaluation study are evaluated individually and the evaluation report must have the method of analysis for the analyte.

2 Since certification for organic fields-of-testing are by methods, the organic analytes in a performance evaluation study are evaluated individually and the overall evaluation by method must also appear in the evaluation report. The laboratory must obtain "acceptable" rating for all represented analytes for each method in order to receive an "acceptable" rating for the method.

3. Additional California analytes in categories 2 and 3 shall be evaluated individually. Since linear regression equations are not available for these analytes, the following percent acceptance ranges have been provided. The acceptance ranges are preliminary and subject to change.

Metals

± 20% for levels ≥ 10 ppb

Inorganic Chemicals & Physical Properties

± 15% for levels ≥ 10 ppm
± 120% for asbestos at all levels

acrolein/acrylonitrile

± 20 % for all levels

Adipates/Phthalates

70% for all levels

Benzidines

± 40% for all levels

Carbamates

± 45% for all levels

Dioxin

± 30% for all levels

Evaluation Profile (wastewater

Ethers/Chlorinated Hydrocarbons

± 30% for all levels

Herbicides

± 50% for all levels

Nitrosoamines/Nitroaromatics

± 30% for all levels

PAHs

± 50% for all levels

Pesticides

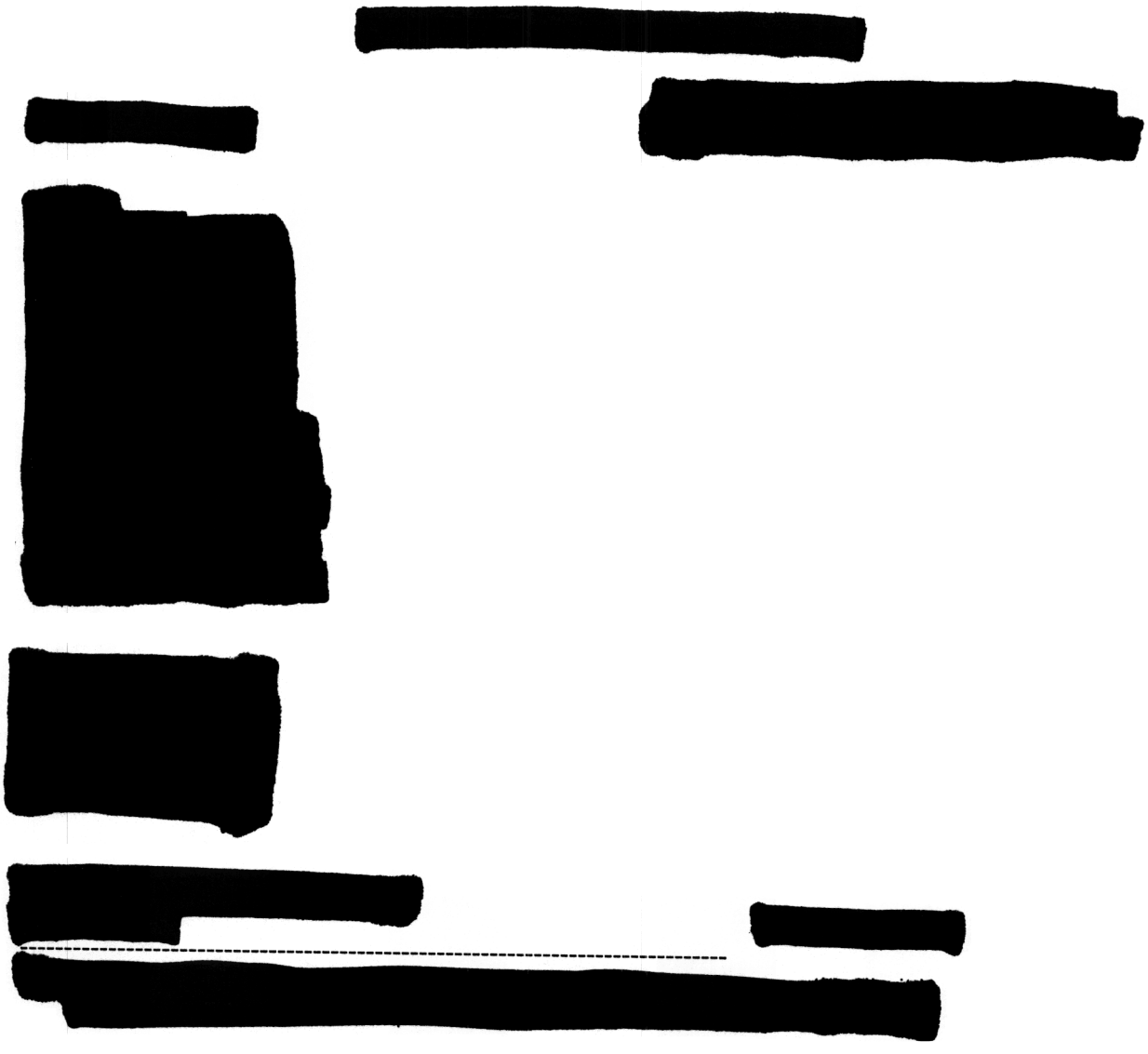
± 30% for all levels

Phenols

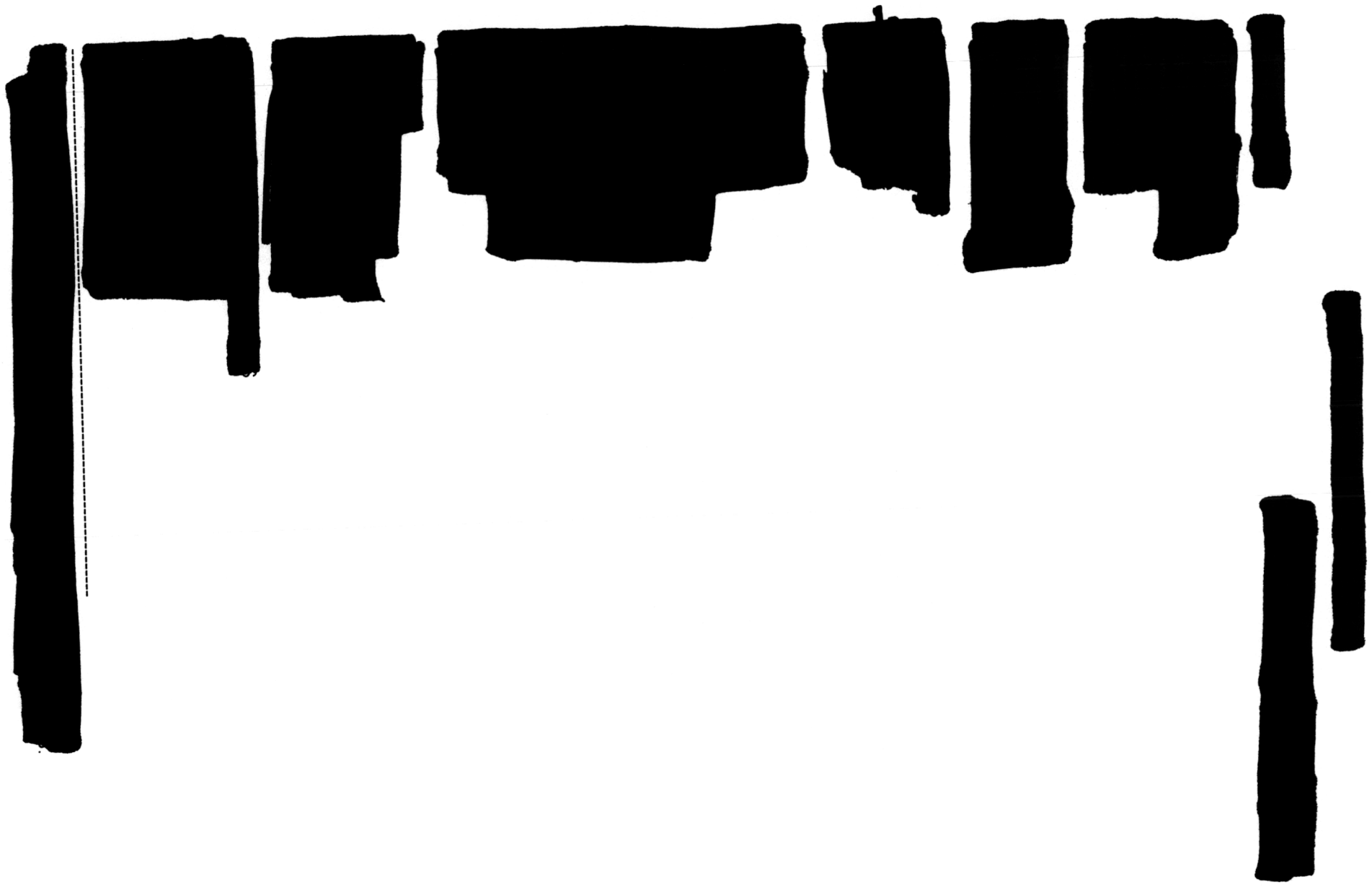
± 30% for all levels

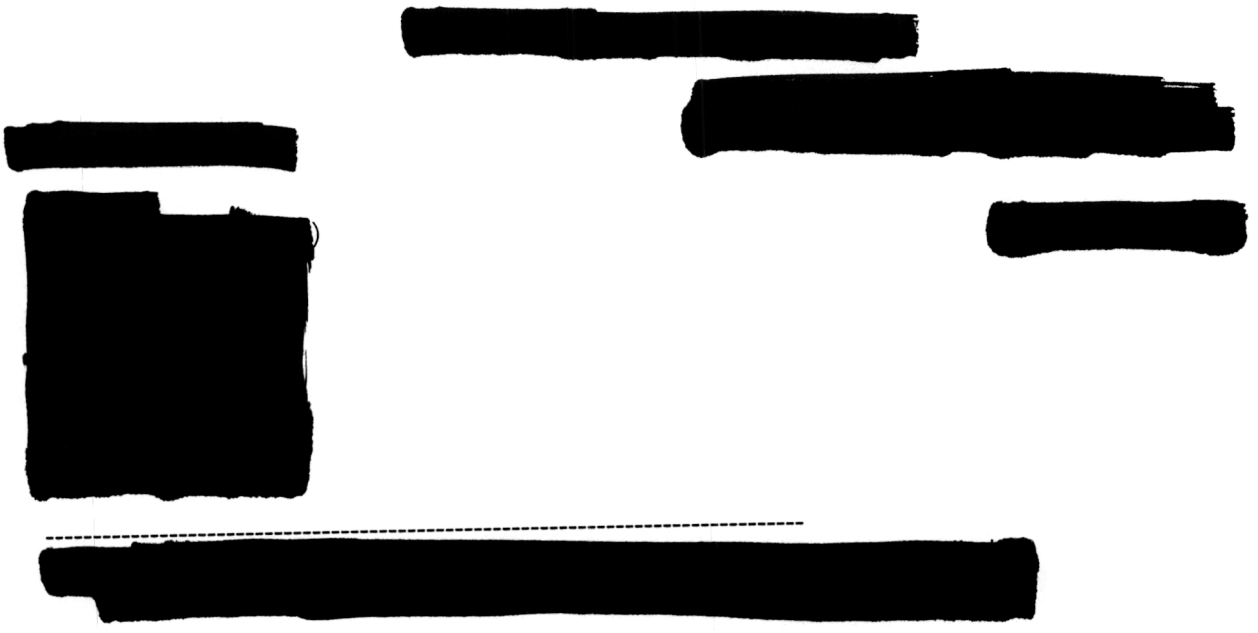
VOCs

± 20% for levels ≥ 10 µg/L



[redacted]





ELAP WS/WP STUDY REQUIREMENTS
(Vendor Information)

Laboratories certified by California ELAP will be notifying PT providers that they will be requiring participation in performance evaluation studies. These laboratories may provide lists of the analytes needed. The studies have been scheduled for the first and third quarters of the calendar year. Laboratories are recommended to participate in the necessary studies during the scheduled three-month windows. Completion dates of the studies may be beyond the three-month period. Each study shall be no longer than 45-days in length. Evaluation reports shall be provided to the laboratory by the vendor within 21 days of the study completion date.

2. Those laboratories electing not to follow the Department's schedule are responsible for timely submittal of evaluation reports by the chosen vendor(s) to ELAP. Such reports must be received at ELAP from the chosen vendor(s) no later than June 30th of each calendar year for the first study, and no later than December 31st of each calendar year for the second study. (Evaluation reports received after the designated dates, June 30th and the December 31st, will not be accepted, i.e. no laboratory will be subject to preferential treatment. Faxed copies of the reports are not accepted.) The two studies must be approximately six months apart. Each study shall be no longer than 45-days in length as designated by the vendor. Evaluation reports shall be provided to the laboratory by the vendor within 21 days of the study completion date.

3. The PT provider must be in compliance with NIST handbook 150, NIST handbook 150-19, USEPA criteria document (December 1998 & updates), and NELAC standards. The PT provider must be NIST accredited if providing PT study samples after October 25, 1999 for the analytes in category 1.

   The samples of water matrix must meet U.S. Environmental Protection Agency requirements as stated in the Criteria Document of December 30, 1998, which is available to all vendors through the U.S. Environmental Protection Agency at Cincinnati, Ohio.

   The samples of water matrix in categories 2 and 3 must meet California requirements as stated in the attached documents.

   Categories 1, 2, and 3 identifies the representative analytes required for analyses. Laboratories requesting samples with organic compounds are required to analyze for all of the representative analytes by method from these lists, whether the analytes are present in the sample or not, i.e. the report forms should have all representative analytes.

5. The evaluation report must have the following minimum information

vendor's name, ID number, location, telephone, fax
type of sample and matrix
study date (beginning and end), study number
laboratory (participant) name, city, state
if mobile, license number, vehicle identification number
laboratory EPA ID code
analytes
method of analyses
reported results
acceptance range
true value
evaluation of "acceptable" or "not acceptable"
overall method evaluation for organic analytes

6 The evaluation reports must be similar to past USEPA reports, i.e. the analytes, etc. should be on the same sheet, rather than on individual sheets.

7. The address and contact for mailing of evaluation report(s) is

Fred Choske
Environmental Laboratory Accreditation Program
California State Department of Health Services
2151 Berkeley Way, Annex 2
Berkeley, CA 94704.

Faxed copies of the evaluation report are not accepted.

8. Electronically transmitted evaluation report(s) in fixed width ASCII, Microsoft Access or Microsoft Excel format should be E-mailed to

[redacted]@dhs.ca.gov

9. Both printed and electronically transmitted evaluation reports are required for California ELAP.

10. Contact for specifications and general questions from PT providers should be directed to

Jensen at (510) 540-2800 or FAX (510) 849-5106

E AP WS/WP STUDY SAMPLE CONCEN ATION
(Vendor Information Only)

Drinking Water Matrix Categories 2 & 3

In order for the study samples to be somewhat comparable to those produced under NIST accreditation requirements, NIST and USEPA requirements must be met. The analytical methods which meet NIST requirements may not be available for all analytes in categories 2 and 3. In such cases, the USEPA approved analytical method designated for the analyte shall be utilized to determine "true value".

[redacted] The random number generator shall be used to determine the concentration of the analyte for the study. [redacted]

Wastewater Matrix Categories 2 & 3

In order for the study samples to be somewhat comparable to those produced under NIST accreditation requirements, NIST and USEPA requirements must be met. The analytical methods which meet NIST requirements may not be available for all analytes in categories 2 and 3. In such cases, the USEPA approved analytical method designated for the analyte shall be utilized to determine "true value".

[redacted] The random number generator shall be used to determine the concentration of the analyte for the study. [redacted]